HARVARD

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INDUSTRIAL PRODUCTION FIGURES

Product	Jan-Jul 1987	Jan-Jul 87 as % of 1986
Electricity (b.kw.hrs)	960	104%
Petroleum (inc. gas cond.)(mil. metric tons)	362	102%
Nat. Gas (b.cu.mtr)	417	106%
Coal (mil. metric tons)	445	101%
Steel (mil. metric tons)	94.3	100.4%
Fertilizer (mil.tons)	21.0	104%
Metal-cutting tools (bil. rubles)	1.6	98%
Robots (1000 units)	8.5	94%
Computer Technology (bil. rubles)	3.0	107%
Tractors (mil. hp)	30.1	94%
Paper (mil. metric tons)	3.6	99.4%
Cement (mil. metric tons)	79.6	102%
Meat (mil. metric tons)	6.2	106%
Margarine (1000 tons)	na	na
Watches (mils)	40.5	99.4%
Radios (mils)	4.7	9[illegible]%
TV sets (mils)	5.0	91%
Automobiles (1000s)	774	100.3%

LIVESTOCK HERDS
(million head)

	Aug 1 1986	Aug 1 1987
Cattle	98.8	98
Cows	29.3	29
Hogs	62	60.1
Sheep & Goats	139	138.4
Chickens	798.1	810.8

BAD NEWS FOR GORBACHEV

Despite his call for improved economic performance, Gorbachev undoubtedly must be disappointed by the economic results for July 1987. Officially it has been reported that productivity of labor rose by 3.6% and industrial production rose 3.5%. However, a clos-

er look at the statistics suggests that he is continuing to have some economic problems. Production of several major products declined; some have been dropping all year. However, now output is also decreasing in some new sectors.

Gorbachev's biggest disappointment must come from the fact that oil production not only leveled off in June of 1987, but in July fell by 3% below what had been produced in July 1986. For the year as a whole to date, oil production is up 2% over what was reported for the first seven months of 1986. However, Gorbachev must be disappointed by July's results. This is the first time output has dropped since November 1983. More importantly, the drop then was corrected by Gorbachev when he came to power by cracking down on discipline. It will be difficult for him to perform an encore in the hope that discipline alone will solve some of the problems. In other words, for the first time the fall in output may be due to something more than poor discipline. Readers should also look at the letter to the editor from our long-time correspondent in the U.S. Geological Service, James W. Clarke.

But it is not only oil output that is suffering. A whole list of products requiring value added are being rejected as part of the new crackdown for improved quality. This started when inspectors were sent into fifteen hundred of the largest Soviet factories in January of this year and it has continued. In addition, even products which do not require much fabrication are beginning to experience a slowdown in their rate of growth. For example, steel production on a July to July basis is virtually constant. Electricity production was up only 3%, gas production only 5%, and coal production was constant. A comparison of output for all seven months with month by month figures shows that the trend is less favorable in all four industries. In other words, there is still growth, but the rate is slipping behind what it had been earlier in the year.

LIVESTOCK REPORT

Gorbachev's problems also seem to extend to agriculture. His livestock herds appear to have diminished. There may be special reasons for this, including an emphasis on better quality livestock, rather than just sheer numbers. Nonetheless, we haven't seen such a drop in the size of the herds on an August 1st to August 1st comparison for several years. This suggests that feed may be in short supply. For example, cattle and cows are down by 1% and hogs are down by 3%. Only the chicken herd has increased in number. A year ago the herds were larger in every instance, except for cows and chickens.

SOVIET TRADE BALANCE WITH EASTERN EUROPE

For the first quarter of 1987, the most notable feature of the Soviet trade figures for the first quarter of 1987 with Eastern Europe is that Soviet exports dropped significantly. This again may be a reflection of poor weather. Soviet exports fell by approximately 700 million rubles. In contrast, however, their imports rose by approximately 70 million rubles. As a consequence, the Soviets managed to reduce their trade surplus from close to 700 million rubles to barely a negligible 14 million. Almost all the East European countries, except for Czechoslovakia, found themselves with fewer Soviet imports. Bulgaria continues to have a relatively negative trade balance with the Soviet Union, as does Hungary. All the other countries received more from the Soviet Union than they exported. The most notable move in trade was with Poland. Whereas last year the Soviets had almost a 400 million ruble trade surplus, this year it is just 200 million for the first quarter.

LETTER TO THE EDITOR

Dear Marshall,

During more than the last decade I have held that the Soviets have had sufficient reserves and undiscovered resources of oil to maintain their production at levels called for by their planning. These predictions were based on study of the geology of the producing basins of the Soviet Union.

Now for the first time I see factors that may very well restrain their ability to continue to maintain their high rate of oil production. Some of the large new fields that are being brought on stream have high initial water cuts in the oil. In addition, the reservoir rock of these fields is not very good -- "scrappy" in the parlance of the petroleum engineer. The decision to produce these fields must have been made at a time when oil

prices were high. It is quite possible that these fields would not have been developed if their oil was to sell for less than $20. Once on stream, however, actual production costs would be well below the selling price, and they would be produced. The overall activity, however, would be at a loss.

The situation with respect to Russian oil in the near-term, however, is very good. They probably maintain a 2:1 reserves-to-production ratio, and they claim to be meeting their goals for discovering new reserves. They could miss fully replenishing their reserves for a decade and not significantly compromise their reserves-to-production ratio, provided these reserves are not in "scrappy" reservoirs and provided the water cuts are not too high. We will continue carefully to watch these developments.

James W. Clarke
Geologist
U.S. Dept. of the Interior

ANNOUNCEMENT OF CORPORATE SPONSOR SEMINARS

The Russian Research Center has scheduled its annual one-day Journalist Orientation for Monday, September 28. This conference is traditionally our largest, so we encourage our readers to send in applications early while space is still available. If you are not able to commit yourself until the last minute, please call and let us know that you intend to participate. Unregistered participants who appear unexpectedly on the morning of the conference are very difficult to accomodate. A program and application form are included with this newsletter.

In light of the interest shown in joint venture opportunities with the Soviet Union, we have joined forces with the Fairbank Center for East Asian Research at Harvard to schedule a Corporate Seminar for Monday, October 26. We intend to examine the topic of joint ventures, focusing primary attention on opportunities in both the Soviet Union and China. We will try to determine why the Chinese, while not entirely successful in their efforts, have more actively pursued the option of joint venture contracts than the Soviet Union and how Western experiences in Chinese joint ventures can to some degree inform us about what to expect in Soviet joint venture projects.

CURRENCY FIGURES

Rubles Purchased per 100	Aug 12 1987	Aug 19 1987
Austrian shilling	4.89	4.90
UK pound	101.61	102.58
FRG mark	34.36	34.45
US dollar	64.93	64.60
French franc	10.31	10.31
Japanese yen	.429	.430
Italian lira	.0474	.0476
Swiss franc	41.41	41.52

THE RUSSIAN RESEARCH CENTER takes no official stand on any economic or political trend. The views and analyses expressed in this Newsletter are those of the authors directly associated with the article, or unless otherwise stated, with those of the editors, Marshall I. Goldman and Catherine Reed. RRC @ 1986

SOVIET BALANCE OF TRADE WITH EASTERN EUROPE FOR THE FIRST QUARTER OF 1982 - 1987

(in million rubles)

	Exports from U.S.S.R.						Imports to U.S.S.R.					
	1982	1983	1984	1985	1986	1987	1982	1983	1984	1985	1986	1987
Bulgaria	1105	1357	1517	1423	1607	1462	1134	1327	1405	1436	1421	1570
Czechoslovakia	1161	1421	1563	1545	1537	1538	1247	1341	1468	1550	1555	1585
GDR	1358	1641	1754	1819	1847	1718	1507	1607	1935	1916	1742	1676
Hungary	838	952	1123	1106	1118	1011	837	899	1005	1114	1148	1172
Poland	1115	1258	1369	1460	1601	1444	893	1187	1263	1194	1233	1232
Romania	346	433	499	426	698	598	432	444	452	485	586	522
	5923	7062	7825	7779	8408	7771	6050	6805	7528	7695	7685	7,57
	-127	+257	+297	+84	+723	+14						

Gorbachev's *perestroika* and the 'new' Soviet Union

By Marshall I. Goldman
Special to The Globe

The contrast between what is and what is supposed to be in the future could not be sharper. Arriving at a Soviet airport or border crossing, the traveler, whether foreign or Soviet, is met with a snarl and a suspicious look – a response not much different from that found in any Moscow government office or store. But why, asks one of the new *glasnost*-age newspapers, can't we smile at one another? After all, "What deposit box have [our smiles] been stashed in. . . . *Perestroika* [restructuring] is under way. . . . Let us greet the future with beaming faces."

While the Soviet Union is always a fascinating place for a sovietologist to visit, this year it is more so than usual. What has been one of the most conservative societies in the world is now being stirred by Mikhail Gorbachev and his *glasnost* [openness] policies. Soviet officials have always claimed that the Soviet Union was a revolutionary force, but that was a facade, hiding a social, economic and political system which had barely changed since the early 1930s. In fact, except in the mid-1950s and again in the mid-1960s, far-reaching change and even proposals for such change were rarely made. For that matter, even to suggest to a Soviet official or scholar that the Soviet Union might benefit from some alteration of domestic policy was to invite a diatribe about how sovietologists are nothing but lackeys of the military-industrial complex. But now that seems to have changed. This June it almost seemed as if all those past defenders of the Soviet system had been passed through an ideological laundromat. Yet whatever the ideological ferment, in many ways the Soviet Union with its snarls and suspicions seems like the same old place. There is considerable change in the air, but as yet still relatively little on the ground.

Yet the visitor does notice some physical changes. There is of course a danger of overenthusiasm, but it does not seem that an effort has been made to brighten up what have heretofore been the austere and often gloomy Soviet cities. Moscow and Leningrad streets now sprout a few outdoor cafes under bright colored awnings and canopies. The Soviets have also erected dozens of wooden teepee-like kiosks. They are intended to provide additional outlets for the sale of summer merchandise in order to supplement the perennial shortage of Soviet sales outlets. Unfortunately the vast majority of these teepees looked like they were used only on opening day.

The Soviets are also making an effort to provide better facilities for tourists. Within the last few years, three or four new hotels have been opened and they are also remodeling the venerable Metropol in Moscow and Astoria in Leningrad (even if it takes Finnish laborers to do this). They have a long way to go, since the service in even the new hotels has to be experienced to be believed. But there are exceptions, especially in the Hotel Mezhdunarodnaia, built by Dr. Armand Hammer.

Long lines for food

What has not changed, even now after two years of *perestroika*, are the ubiquitous long lines for food. Meat and chicken from Hungary are in somewhat better supply, but because of the cold, late winter and spring floods, fruit deliveries are later than normal and as a consequence, the lines longer than usual. Then, of course, there are the Gorbachev lines for vodka and even beer. It is illegal to serve or sell any alcoholic beverage before 2 p.m., but the lines start forming as early as noon.

Similarly, most buildings, even new ones, seem as shabby as ever. Nor is there any noticeable change in the number of policemen on the streets. Despite *glasnost*, *perestroika* and the call for more individual initiative and self-reliance, the state still finds it necessary to superintend the most trivial human activities. Nowhere was this more evident than in the departure lounge of the Leningrad airport, where it appeared as if someone had purposefully set out to make a relatively simple matter a chaotic cacophony of confusion.

But it is in the intellectual realm where the ferment is the most fascinating. Everyone is talking or reading about the latest resurrection of history or revelation of malfeasance. Moreover, Soviet newspapers have taken to publishing the most unexpected things. They still don't print everything, but never before have they printed attacks on Soviet military generals and a colonel for "rudeness, boorishness and intimidation," as well as a "loss of Party quality, social distortion and moral disease." Moscow News, one of the more outspoken if seldom available weekly newspapers, had an article describing why Soviet readers had such a hard time trying to buy copies of the paper.

For me one of the most surprising signs of change was a request by a reporter from the same Moscow News for an interview with me. Admittedly, I am a bit of a masochist. I have been interviewed many times before by Soviet reporters and each time not only my words, but my ideas were so badly mangled that my reported comments end up as the opposite of what I actually said. Occasionally that happens in the West as well, but with nowhere near the consistency that it happens in the Soviet Union. Nonetheless, I keep agreeing to Soviet interviews in the hope that at least part of my message will get through. Imagine my amazement then when my interview was published and published accurately. The editors prefaced my article with the caveat that "our editorial staff does not see Goldman's view as final," but no one was assigned to rebut my article, as often happens when the Soviets print critical Western viewpoints. And my comments were very critical. Yet the paper quoted me as saying that the effort to bring joint ventures to the Soviet Union would not work as long as the Soviets were so demanding and foreigners could not make a profit. They also reported the findings of my book that reveal that the productivity of equipment imported into the Soviet Union from the West is only about 60 percent of what that same equipment attains in the outside world.

In another offshoot of *glasnost*, a group of local residents had mobilized to halt a state construction team from cutting down a 200-year-old elm tree. They had organized a 24-hour watch. I was even invited to sign a protest petition. After a few days they had collected 2,000 signatures.

Environmental concerns

This *glasnost* about the environment has even resulted in a long-denied acknowledgement that environmental degradation of Lake Baikal continues. For more than 15 years the official Soviet media have insisted that the discharge from cellulose plants into the world's most unique fresh-water lake was being properly treated. Believing what they heard, the United Nations in June 1985 gave the Soviet Academy of Sciences a special award for protecting Lake Baikal. In reality, however, the degradation continues much as before. With *glasnost*, however, things have finally changed. In May of this year, Soviet authorities finally decided to fire the deputy minister of the USSR Timber, Pulp, Paper and Wood Processing Industry for improper operation of the plants on Lake Baikal. They also fired the deputy minister of the Forestry Industry for needlessly removing trees from the watershed. Most important of all, Soviet authorities have finally faced up to the fact that the cellulose plants should never have been built in the first place. They have decided to convert them to furniture factories. That certainly is a step in the right direction. However, in the spirit of *glasnost*, Valentin Rasputin, a writer who has been a persistent critic of any development in the region, again complained that these new proposals were not much different from the old ones. It was nice to hear that the factories would be converted, but he noted that conversion would take place only in five years time. *Glasnost* is good, but action is better.

In the sphere of economic theory, a good friend, Nikolai Shmelev, wrote an article in something comparable to the New Yorker, in which he bitterly attacked the existing economic system. As he sees it, central planning and the ban on private initiative no longer make sense. Illogically, Soviet authorities delight in the harassment of imaginative peasants eager to make a profit by transporting strawberries and meat from surplus regions to those with deficits. At the same time, those same bureaucrats placidly spend billions of dollars a year on food imports to offset the shortages. Among other solutions, Shmelev calls for an open acknowledgement of a 2-to-3-percent unemployment rate; that will serve to make Soviet workers take their jobs more seriously. He wants prices, profits and contracts to replace planning; that will lead to greater attention to costs, quality and consumer satisfaction. Among other surprises, he wants to make the ruble freely convertible and allow Soviet enterprises and civilians to import and export anything they want; that is the way to end Soviet protectionism and force Soviet manufacturers to face up to world quality standards.

Western sovietologists have been advocating similar reforms for decades. It is exhilarating, although a bit of a shock, to see Soviet economists advocating the same changes, even if politically they will be very difficult to digest. That is why Mikhail S. Gorbachev's acceptance of a more timid, but nonetheless vaguely similar brand of *perestroika* has aroused such interest both in and outside the Soviet Union. While he has attacked Shmelev by name for his unemployment proposal, Gorbachev and his close advisers have called for some version or another of almost everything else he proposes.

Gorbachev's program resisted

For his audacity, Gorbachev has encountered fierce resistance. It was the talk of Moscow that before the June meeting of the Central Committee of the Communist Party, Gorbachev publicly acknowledged that he had been unable to push through 12 laws that he wanted which would have circumscribed the central planners. Reflecting the power of the bureaucrats seeking to protect their jobs, as well as legitimate concerns that many of the laws were imperfect, these bureaucrats forced Gorbachev to wait until 1991 to implement the bulk of his program. He did win approval to put one law affecting enterprise operations into effect next year and he did manage to make three confederates full members of the Politburo, but his inability to win approval for his full legislative package and his failure to purge some of the Brezhnev holdovers from the Politburo is a clear indication of the opposition that Gorbachev's reforms are encountering.

No one can deny that even if Soviet border guards, hotel clerks and bureaucrats still snarl instead of smile, the Soviet Union nonetheless has been infused with new and more vital ideas. But as the continuing resistance to Gorbachev shows, so far the implementation of those ideas, especially in the form of concrete economic and political actions, leaves much to be desired.

Several skeptics found striking comparisons with the reform process in Czechoslovakia in 1968. What, they ask, is the difference between the ill-fated Alexander Dubcek, the Czech reformer, and Gorbachev? "None!" they answer, "only Gorbachev doesn't know it yet."

Marshall I. Goldman is professor of economics at Wellesley College, associate director of the Russian Research Center at Harvard and author of the newly released Gorbachev's Challenge: Economic Reform in the Age of High Technology.

Beijing Shows Moscow the Way

By Marshall I. Goldman

Just like Deng Xiaoping before him, Mikhail Gorbachev has made economic reform his number one priority. Unhappily for the true believers in Marxism and Stalinism, both leaders now concede that the use of central planning and a de-emphasis, if not an outright ban, on market processes and even private enterprise and foreign investment may make for purity of ideological thought, but bring with it economic distortion and serious shortcomings.

The problem that no centrally planned communist country seems able to resolve is that the central planners always insist on greater economic growth than the population at large is willing to support. This results in an over-ambitious investment program, which in turn necessitates forced saving. Thus, in virtually all centrally planned economies, demand in the form of purchasing capacity almost always far exceeds the goods available to absorb the demand.

Not surprisingly in that kind of environment, the workers quickly conclude that if the state is going to pretend that it is paying them, they in turn will pretend to work. Inevitably, the result is poor quality, lack of innovation and an increased determination by the planners to solve the problem. As one Chinese analyst put it, "The more centralized, the more rigid the economy, the lazier the people [and] the poorer they are; and the poorer the people are, the greater the need for centralization."

Wounded Pride

After some hesitation, Mr. Gorbachev has now decided that, like Mr. Deng, he must break out of this rut. Within the past few weeks, he has announced some bold initiatives, many of which bear a striking resemblance to those Mr. Deng introduced a few years earlier in China. Just how similar is Mr. Gorbachev's approach and what might he learn from Mr. Deng's efforts before him?

Soviet officials and researchers take unkindly to suggestions that what the Chinese are doing might provide some guidance to them. They are as happy to hear that as they are to hear that the new Soviet reforms bear an uncanny resemblance to what takes place in capitalist economies. Such responses are mostly a consequence of wounded pride and an unwillingness to acknowledge that 60 years of central planning have produced needless sacrifices. It hurts to realize that although the Soviet Union produces 50% more steel than any other country, it fails miserably in the realm of consumer well-being and high technology.

In fact, until early last year, the official Soviet line was that reforms in China were ill-suited for the Soviet Union. Soviet scholars could find virtually nothing to praise about the Chinese reforms, which began in 1978. Soviet writers repeatedly scorned the monumental changes taking place in Chinese agriculture. In their eyes, the growth in output was nothing to exult about; whatever growth there was came at the expense of the mass of the peasantry. While some Chinese were indeed becoming richer, too many other peasants remained poor. Moreover, those Chinese who did earn more did so by pushing up food prices, something bitterly resented by the urban workers and bureaucrats. Finally, the growing breakup of the communal fields meant the end of economies of scale that came when the small plots of individual peasants were combined.

As for such other measures as the legitimation of the private trader, the return of foreign investors, the establishment of special economic zones and the decentralization of investment, Soviet commentators saw this as reinforcement of their argument that China had long since turned its back on communism and for that matter even on socialism. No wonder unemployment, prostitution and juvenile crime were returning to China.

Such criticism of the Chinese experiment predated Mr. Gorbachev's rise to power in March 1985, but continued throughout most of the first year he was in control. Hostility to reform in general was similarly reflected in Mr. Gorbachev's economic policy. Throughout 1985, Mr. Gorbachev's vision of the future seemed to be restricted to a return to discipline and to a rejection of vodka. There was also the traditional plea for both more centralization and more decentralization, but as in the past, it was unlikely that Mr. Gorbachev would be able to combine such divergent policies any more successfully than his predecessors did.

Whereas the Chinese leapt at the chance to establish their own enterprises, the Soviets seem hesitant if not actually averse.

One of the first hints that there might be a change in how the Soviet Union looked at China occurred in January 1986. While I was on a visit to Moscow, some Soviet officials revealed to my wife, a China specialist, that they were about to be sent to China "to see if there might be something there relevant after all." There must have been, because shortly thereafter, the tone used to describe the Chinese experiment changed abruptly. At times, the praise was just as unbalanced and unwarranted as the criticism had been earlier.

This year, the Soviet economists and officials began to announce the advent of some far-reaching institutional changes. Although even now it is not acknowledged, most of these changes had been introduced considerably earlier in China. The Soviet Union so far has not copied everything the Chinese have done, but now private trade and joint ventures are legal and the Soviet Union is also talking about allowing more of a role for the market, prices, and managerial discretion.

What strikes the visitor to the Soviet Union about the process there compared with China, however, is not only how long it has taken such proposals to win acceptance, but the comparative lack of enthusiasm with which they are being implemented. This is unlike China, where private trade seems to be flourishing and joint ventures, while hardly the success it was hoped they would be, nonetheless seem to be attractive enough for those who are patient and willing to settle for second or even third best.

By contrast, economic reform in the Soviet Union is virtually all talk so far. (Admittedly, the kind of talk one hears today was all but impossible to hear a few months ago.) Whereas the Chinese leapt at the chance to set up joint ventures and establish their own enterprises, and even their own trade associations for private merchants, the Soviets seem hesitant if not actually averse. Five months after it has become legal to have joint ventures, only six minor efforts have actually been approved in the Soviet Union and none as yet are operating. In China, by contrast, once joint ventures were legal, hundreds were created.

There is the same hesitancy in the Soviet Union about going into business for yourself. As one state taxi driver put it during my visit to Moscow, "If we were German, there might be more private taxi drivers; but we are Slavs." A sample of 20 state drivers in Moscow and Leningrad indicated a similar hesitancy.

It is not only the difference in culture, but also the impediments created by the bureaucrats. Certainly not all Chinese bureaucrats have been fully supportive, but Soviet officials seem to have gone to extra lengths to ensure that little of significance will take place. It is as if they are trying to protect themselves against the day when Mr. Gorbachev is gone and someone then asks: "Who was it who made it easy to allow for the bourgeois exploitation of the Soviet people?"

Why Take Risks?

Reform might have come easier to the Soviet Union had Leonid Brezhnev lived four years longer. As Mr. Gorbachev himself has said, the last years of Mr. Brezhnev's life, particularly the last four, brought the Soviet Union to "a semi-crisis." If Mr. Brezhnev had lived four years longer, perhaps then as in China after its Cultural Revolution, the economy and the Soviet Communist Party would have been in such a shambles that everyone in the Soviet Union would have been eager for reform. As it is, the party is still there to oppose change and, after all, the Soviet economy is not now about to collapse—so why take such risks? It would also help if the Soviets had a band of supporters like the overseas Chinese.

Yet however more favorable the environment in China, if the reforms are to take hold in the Soviet Union, Mr. Gorbachev himself ultimately will have to make an even greater commitment to the change. When asked about their reforms, the Chinese cite Mr. Deng's statement that it matters not whether the cat is black or white, but only whether it catches mice. So far, Mr. Gorbachev, as committed as he is to increasing the role of the market, is unwilling to describe the cat as anything but red. That may keep his ideologues quiet, but sooner or later he will also have to acknowledge that it is the wrong signal.

Mr. Goldman is a professor of economics at Wellesley and author of "Gorbachev's Challenge: Economic Reform in the Age of High Technology" (Norton, 1987).

OPINION

The social costs of economic change East and West

By T. Anthony Jones

IN the last few weeks, Mikhail Gorbachev's position seems to have strengthened, and as a result his reforms seem more likely than ever to become a reality. Regardless of Mr. Gorbachev's fate, though, the social contract in the Soviet Union is in for a major overhaul in the next few years. In addition to those policies designed to get the economy moving, there are also long-term trends in the use of new technologies that will fundamentally change the relationship between the state and civil society.

Adjusting to new technology is proving to be painful for large segments of the population in the West, and it looks very much as if the Soviet Union is now going to share the experience. Some elements of the "restructuring" (*perestroika*) have already received some attention in the West, especially those involving the tying of wages to effort, and the growing emphasis on the profit motive.

Although the difficulties are enormous, it seems clear now that Soviet industries are in for major reorganization during the next decade or so. The emphasis on profitablility and efficiency, however, has already given rise to a heated debate on the social consequences of such a move. The very foundation of the social contract, the guarantee of full employment, is being put in jeopardy. The population, though, is being given mixed signals. Some commentators talk about the possibility of unemployment as a permanent feature of Soviet society, with others assuring people that displaced workers will be allocated new jobs.

But where? Given the current waste of labor which the system encourages, and the consequent shortage of labor throughout the economy, laid-off workers will find it relatively easy to find employment of some kind.

Also, Soviet economists claim, technological growth will create enough new jobs to prevent unemployment from becoming a problem.

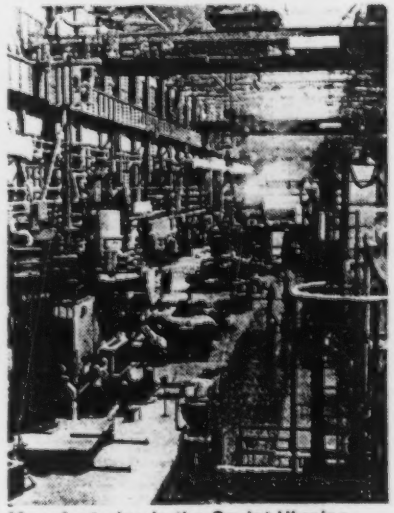
So far, the discussion has sounded very much like that which took place in the West a decade ago. According to Soviet planners, though, the similarities are superficial, for they claim that a socialist economy can avoid the problems of the Western nations. My own examination leads me to think that the similarities may prove to be considerable.

Although the USSR has not automated its industries to the same extent as other industrial societies have, automation has nevertheless been developing steadily since the early '70s. Although it now affects only about 1 in 8 industrial workers, automation will rapidly spread in the coming years. As this occurs, displaced workers will have to find alternative work. Some will move to less skilled, lower-paid jobs in manufacturing and construction, but many will have to take jobs in the service sector.

Since automation affects primarily manufacturing jobs (about one-third of the labor force), the shortage of service workers is not likely to be eased through new technology, and so the demand for labor in this sector will remain high.

This reallocation will not only produce a change in occupation, it will also mean a significant decline in income. Not only are service workers paid less than those in manufacturing, but the gap has been steadily widening. In the early 1940s the gap was only about 5 percent, but by 1984 service workers were on the average getting 30 percent less. Wages of the least skilled service workers (probably 10 percent of the labor force) are even further behind.

For many Soviet workers, the old social contract will no longer be in operation. For some, unemployment may become a fact of life, and for many of those whose manufacturing jobs disappear there will be a significant decline in their incomes. The transition will be cushioned by the provision of full pay for up to three months during which workers can search for work or retrain, but for many this will just delay pay cuts. For those who fail to find work, the payments will presumably come to an end. Those who are not displaced may not be entirely safe, either, since it is already becoming clear that



Manufacturing in the Soviet Ukraine

wages of workers in automating and robotizing workshops often decline as the job description changes.

As in the West, therefore, many workers will have to scale down their aspirations and settle for a future less bright than they had envisaged. So, of course, will their children, for an additional reason – the educational reforms of 1984. If the reforms survive the current public hostility toward them, they will result in up to 70 percent of 15-year-olds moving into special vocational-technical schools. It is clear that it will be the sons and daughters of those lower down the social scale who will populate these schools. Entry to higher education, and hence to a place in the intelligentsia, is most unlikely for these pupils, despite various "affirmative action" programs to take social background and experience into account. So for many parents the dream of upward mobility for their children may be another hope to be given up.

Popular resistance to Gorbachev's reforms has been aimed in large part at their consequences for "social justice," in particular at the redistribution of income and the threat to job security. Letters to the editor complain that workers are having to pay the costs of change, and some workers have even begun overtly to resist some of the new programs.

Even if the reforms are scrapped, however, the continuing introduction of new technology will have the same effect. As in the West, automation and robotization may be expected to have a profound effect on social and economic life, and getting rid of particular leaders and policies will not prevent this from happening. Also as in the West, Soviet economists and planners are having to rethink their attitudes to technology. The earlier, blindly optimistic assumptions that new technologies bring nothing but benefits is giving way to a concern for the "human" aspects of industrial organization.

Indeed, there is much talk these days of reorganizing the workplace to make work more interesting, and of designing technology in such a way that it does not "deskill" jobs. Whatever the fate of these proposals, it is clear that the years ahead will see changes in the Soviet social contract, with or without Gorbachev.

Whether this will mean greater convergence of East and West, though, remains to be seen.

T. Anthony Jones teaches sociology at Northeastern University and is a fellow at the Russian Research Center at Harvard University.